

DOCKET NO.: MSFT-0281/163946.01

Application No.: 09/800,382

Office Action Dated: October 19, 2004, Advisory Action February 4, 2005

Amendments to the Drawings

The attached sheet(s) of drawings include Fig(s) 2, 3, 4, 5 and 6. The sheet(s), which includes Fig(s) 2, 3, 4, 5, and 6 replace the original sheet(s) including Fig(s) 2, 3, 4, 5, and 6.

Attachment: Replacement Sheet(s)

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REMARKS

In response to the Office Action dated October 19, 2004 and the Advisory Action dated February 4, 2005, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Applicants thank the Examiner for granting the Examiner's Interview of November 15, 2004. An interview summary is attached.

Claims 1-20 are pending. Claims 1-20 have been rejected. Claims 1 and 16 are independent claims from which claims 2-15 and 17-20 respectively depend. Claims 1, 4, 7, 8, 11, 16, 18, 19 and 20 have been amended. Claims 4, 7, 8, 11, 18 and 20 were amended solely to provide proper antecedent basis as a result of amended claims 1 and 16. Claim 19 was amended to correct a typographical error. No new matter has been added. Support for the amendments can be found in the application as originally filed on page 2, lines 4-25 and elsewhere in the application.

Replacement Drawings

Replacement Drawings for FIGs. 2, 3, 4, 5 and 6 are provided solely to correct margins and line thickness. No other changes were made.

§112 Rejections

Claims 1-20 have been rejected under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements. Claims 1 and 16 have been amended to include structural cooperative relationships. Applicants respectfully request the withdrawal of the § 112 rejections of these claims and of the claims which depend therefrom.

§103(a) Rejections

Claims 1-15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Chalmer et al. (U.S. Patent No. 6,687,903) in view of Weber (U.S. Patent No. 5,781,769).

Applicants' amended claim 1 recites:

A method of scheduling a future event comprising:

receiving a first event data, the first event data including a first event and a time at which the first event is to occur;

creating a first data structure comprising a plurality of elements, each element associated with a time interval, the plurality of elements including at least a first element associated with a first time interval defined by a first start time and a first end time and a second element associated with a second time interval defined by a second start time and a second end time;

in response to determining that the time at which the first event is to occur falls within the first time interval, adding the first event to a list of events associated with the first element of the first data structure;

receiving a second event data including a second event and a time at which the second event is to occur;

in response to determining that the time at which the second event is to occur does not fall within any of the time intervals associated with the first data structure, creating a second data structure comprising a first element associated with a time interval encompassing the time at which the second event is to occur; and adding the second event to a list associated with the first element of said second data structure.

(emphasis added.)

Applicants respectfully submit that Applicants' amended claim 1 is patentable because neither Chalmer nor Weber alone or in combination, disclose or suggest all the features of Applicants' amended claim 1.

Chalmer is directed to a mechanism for inhibiting process starvation in a multi-tasking operating system by providing a first type of event at periodic timer intervals and providing a second type of event when a running process relinquishes the processor. Chalmer "fails to explicitly teach creating the data structures". (See Official Action, page 5). Hence, Chalmer does not disclose or suggest at least the italicized features of Applicants' amended claim 1.

Weber is directed to using content addressable memory to process timed events. Events are stored in content addressable memory "which each contain an identifier field for a particular event to be processed at a later time and which also contain a time value field indicative of the time at which the event is to be processed." (See Weber, column 2, lines 12-15). Time values "are applied as inputs to the CAM. The CAM generates ...the event identifier field of any entries in the CAM for which the time value input is equal to the stored time value field." (See Weber, column 2, lines 19-22). Hence "[e]vents are "scheduled" by writing an entry to the CAM rather than adding an entry to a sorted queue." (See Weber, column 2, lines 35-37). "Similarly, events are found by...applying signals to the CAM rather

than...searching for an entry in a queue data structure...” (See Weber, column 2, lines 37-40.) Hence Weber fails to disclose or suggest at least the italicized features of Applicants’ amended claim 1.

As neither Chalmer nor Weber, alone or in combination disclose or suggest all the features of Applicants’ amended claim 1, Applicants respectfully submit that claims 1 and the claims that depend therefrom are allowable and request the withdrawal of the § 103 rejections of these claims.

Claims 16-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Jones et al. (U.S. Patent No. 6,003,061) in view of Kaufman et al. (U.S. Patent No. 5,313,647).

Applicants’ amended claim 16 recites:

A system for scheduling future events comprising:
a first data structure comprising a plurality of elements, each of the plurality of elements of the first data structure associated with a period of time defined by a start time and an end time, the plurality of elements of the first data structure comprising at least a first element associated with a first start time and a first end time and a second element associated with a second start time and a second end time;
a scheduling module which, in response to determining that a time at which a first event is to occur falls within the first start time and the first end time, creates a second data structure associated with the first element of the first data structure and adds the first event to the second data structure; and which in response to determining that a time at which a second event is to occur falls within the second start time and the second end time, creates a third data structure associated with the second element of the first data structure and adds the second event to the third data structure.

(emphasis added.)

Applicants respectfully submit that Applicants’ amended claim 16 is patentable because neither Chalmer nor Weber alone or in combination, disclose or suggest all the features of Applicants’ amended claim 16.

Jones is directed to a resource management mechanism for arbitrating resource requirements and resource usage among application programs that run simultaneously on a computer. Upon receipt of a request from a consumer entity for the commitment of a specified share of the resource, the resource planner determines whether the specified share of the resource should be committed to the consumer entity based on representation of

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resource usage policy and present commitment of shares of the resource. Jones does not disclose or suggest at least the italicized features of Applicants' amended claim 16.

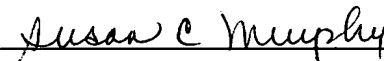
Kaufman is directed to a processing element that executes a process for spawning child processes in which the process starts with the same copy of data as the parent process and changes (only) therefrom are retained as needed. Kaufman does not disclose or suggest at least the italicized features of Applicants' amended claim 16.

As neither Jones nor Kaufman disclose or suggest all the feature of Applicants' amended claim 16, Applicants respectfully submit that claim 16 and the claims that depend therefrom are allowable and request the withdrawal of the § 103 rejections of these claims.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present Application is in condition for allowance. Withdrawal of the rejections of the claims and an early allowance is earnestly solicited.

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